

CLAIMS

WHAT IS CLAIMED IS:

1. A moving picture security code application system comprising:

(a) code symbol recording equipment for recording code symbols on a moving picture record medium; and

(b) a control system for controlling said recording equipment to cause it to record on said record medium information comprising a plurality of separate coded symbols, each being recorded in a separate frame of said moving picture.

2. A system as in Claim 1 in which each of said code symbols is located in a visible portion of said frame, said symbol comprising one or more small marks which look like defects.

3. A system as in Claim 1 in which each of said symbols is made of a plurality of specks formed into a pattern representing an alphanumeric character.

4. A system as in Claim 3 in which each of said specks has a size large enough to avoid elimination by the data compression routine of a video camera used to make a copy of the motion picture recorded on said record medium, said specks being

relatively small and widely spaced from one another so as to be unobtrusive.

5. A system as in Claim 1 in which each of said symbols is recorded in a plurality of different adjacent frames prior to the location of the next component of said symbol.

6. A system as in Claim 1 in which each of said symbols is recorded a plurality of times at spaced-apart locations on said record medium.

7. A system as in Claim 1 in which each of said symbols comprises a representation of one digit of a multi-digit print identification number, and a unique identification number is provided for each of a plurality of prints of a moving picture.

8. A system as in Claim 1 in which each of said symbols is composed of one or more small marks made to look like a defect selected from the group consisting of dirt or dust particles; scratches; and color defeats.

9. A system as in Claim 1 in which each of said symbols comprises an array of visible specks representing one digit of a print identification number, said dots being large enough to avoid their eradication by the compression means used in a video camera used to make a copy of the program on said

film when projected onto a motion picture display screen, but small and spaced apart so as to be essentially, unnoticeable by an ordinary viewer of the film, each of said symbols comprising a selected combination of specks from a dot matrix.

10. A system as in Claim 7 in which said medium is motion picture film having a leader, and including a device for recording said identification number on said leader.

11. A system as in Claim 10 in which said identification number on said leader is in non-coded alphanumeric form.

12. A system as in Claim 4 in which each of said dots is between approximately 0.005 inch and 0.015 inch in diameter.

13. A system as in Claim 1 in which said recording equipment includes fiber-optic cables with an exit focusing lens and a controlled light source for sending light through selected ones of said fiber-optic cables to record a pattern of light spots on said record medium and thereby form one of said symbols.

14. A system as in Claim 13 in which said recording equipment includes means for synchronizing the formation of said spots with the movement of said record medium through a copy

recorder for recording the moving pictures on said record medium.

15. A system as in Claim 14 in which said record medium is motion picture film and said copy recorder is a film printer.

16. A motion picture film copy bearing a coded identification number with a plurality of different components, each of said components being composed of one or more small, separated marks resembling defects and located in the visible portion of a separate one of the frames of said film copy.

17. A film copy as in Claim 16 in which said identification number also is recorded on a leader of said film.

18. A film copy as in Claim 16 in which each of said components is composed of a plurality of defects in a coded pattern representing one digit of said identification number, the size of each spot being close to the minimum size capable of being stored during video camera data compression, the location of each such component being such as to minimize interference with the normal viewing of said film.

19. A film copy as in Claim 16 in which each of said components is repeated at least once in an adjacent frame before a second component is recorded.

20. A film copy as in Claim 16 in which each of said components is repeated at least once before a second component is recorded and in which said symbol is repeated at spaced intervals along said film

21. A film copy as in Claim 16 in which said separate ones of said frames are located a substantial distance from the other of said frames.

22. A motion picture film print bearing coded information, said coded information being represented by a plurality of small marks having the appearance of defects formed into code symbols representing said coded information.

23. A film print as in Claim 22 in which said marks are made to resemble defects from the group consisting of dirt particles, color defects, scratches and a combination of any of the foregoing with one another.

24. A film print as in Claim 22 in which said marks comprise a plurality of groups of defects, each arranged in a predetermined pattern or shape representing a separate digit of the print number of the film.

25. A method of counterfeit detection comprising the steps of:

(a) recording within a motion picture film copy an identification number of the copy, said identification member comprising a plurality of digits, each recorded in code form in the visible area of a different frame of said film, said different frames being spaced from one another along the length of said film;

(b) keeping a record of the identification number for said copy and the destination to which it was delivered;

(c) viewing a suspected counterfeit copy of said film and determining the copy identification number recorded in said suspected counterfeit copy; and

(d) tracing said copy to said destination to which the copy was delivered.

26. A method as in Claim 25 in which each of said digits is in the form of marks forming a pre-selected pattern, each of said defects being as small as possible without making them invisible to the naked eye or being erased by the data compression of a video camera used to copy the motion picture.

27. A method as in Claim 26 in which each of said patterns is positioned in a frame so as to give minimum interference with viewing of the motion picture image.

28. A method as in Claim 27 in which each of said patterns is located in a predetermined position within the frame.

29. A method of recording coded alphanumeric characters in a motion picture film print, said method comprising;

(a) recording a separate predetermined pattern or defects in the sight area of one or more frames of said film to represent each of said characters, and

(b) storing the location in said film of each of said patterns.

30. A method as in Claim 30 in which said defects are small specks, each pattern appearing in one of widely separated frames to form an alphanumeric sequence representing the code number of said film.